United States Department of Agriculture **Forest Service** **Custer National Forest** **1310 Main Street Billings, MT 59105 406 657-6200**

File Code: 1570
Date: June 16, 2011

Sara Jane Johnson
Native Ecosystems Council
PO Box 125
Willow Creek, MT 59760

Dear Ms. Johnson:

This is my decision on disposition of the appeal you filed, on behalf of the Native Ecosystems Council regarding the Beaver Creek Landscape Management Project Record of Decision (ROD) on the Custer National Forest.

My review of your appeal was conducted pursuant to, and in accordance with, 36 CFR 215.18 to ensure the analysis and decision are in compliance with applicable laws, regulations, policy, and orders. I have reviewed the appeal record, including your arguments, the information referenced in the District Ranger's May 16, 2011 transmittal letter, and the Appeal Reviewing Officer's analysis and recommendation (copy enclosed). The transmittal letter provides the specific page references to discussions in the ROD and project file, which bear upon your objections. I specifically incorporate in this decision the appeal record, the references and citations contained in the transmittal letter, and the Appeal Reviewing Officer's analysis and recommendation.

The Appeal Reviewing Officer has considered your arguments, the appeal record, and the transmittal letter and recommends the District Ranger's decision be affirmed and your requested relief be denied.

Based upon a review of the references and citations provided by the District Ranger, I find the objections were adequately considered in the ROD. I agree with the Appeal Reviewing Officer's analysis and conclusions in regard to your appeal objections. I find the District Ranger has made a reasoned decision and has complied with all laws, regulations, and policy.

After careful consideration of the above factors, I affirm the District Ranger's decision to implement the Beaver Creek Landscape Management project. Your requested relief is denied.

My decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

Sincerely,

/s/ Timothy W. Bond
TIMOTHY W. BOND
Appeal Deciding Officer

United States Department of Agriculture **Forest Service** **Region One** **200 East Broadway P.O. Box 7669 Missoula, MT 59807**

File Code: 1570 **Date:** June 15, 2011
Route To: (1570)

Subject: 1570 (215) A&L - ARO Letter - Beaver Creek Landscape Management Project ROD - Custer NF - Native Ecosystem Council - #11-01-00-0022

To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Sara Jane Johnson, on behalf of the Native Ecosystem Council, concerning the Beaver Creek Landscape Management Project Record of Decision signed by the Ashland District Ranger Walt Allen on the Custer National Forest.

The District Ranger's decision adopts Alternative B as analyzed in the Final Environmental Impact Statement. The Selected Alternative includes treatment to reduce fuels and restore structural diversity on 10,508 acres of a 14,053 acre landscape. About 2500 acres will be thinned or cut commercially; of that, about 960 acres will also have prescribed fire applied. Approximately 4430 acres will be treated non-commercially by mastication or hand thinning, and 3500 of those acres will also have prescribed fire applied post-thinning. An additional 3600 acres would be treated only with prescribed fire. Access to treatment units will require 15.2 miles of temporary roads be constructed; these will be obliterated at the end of implementation. To maintain big game security, seasonal restrictions will be applied to two roads during hunting season in the project area. This modifies the 2009 Ashland Travel Management decision. Obliteration of seven short segments of road totaling 2.1 miles will also occur to reduce road densities and reduce the risk of cumulative watershed effects.

My review was conducted pursuant to, and in accordance with, 36 CFR 215.19 to ensure the analysis and decision is in compliance with applicable laws, regulations, policy, and orders. The appeal record, including the appellant's objections and recommended changes, has been thoroughly reviewed. Although I may not have listed each specific issue, I have considered all the issues raised in the appeal and believe they are adequately addressed below.

The appellant alleges violations of the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Endangered Species Act (ESA), and the Administrative Procedures Act (APA). The appellant requests a reversal of the ROD. An informal meeting was held but no resolution of the issues was reached.

ISSUE REVIEW

Issue 1. The lack of any old growth management strategy will create irretrievable impacts on wildlife within the Project Area, an impact that was never disclosed in the NEP A analysis; the agency has failed to manage old growth for species viability as is required by the Custer Forest Plan.

Response: The appellant contends that there is no old growth strategy and the lack of one will create irretrievable impacts to wildlife in the project area, something that was never disclosed in the BCLMP, in addition the management of old growth for species viability is required in the Custer Forest Plan.

As stated in the BCLMP FEIS (p.3-301) the Forest Plan defines old growth timber, but does not define old growth forest (USDA 1986, pg 136). That is, the Plan defines what an old tree is, or group of old trees are, but does not define the characteristics of old growth habitat that is needed to sustain old growth-dependent species. Therefore, the Forest uses Region One's definition of old growth as documented by Green and others (2007). Management Area G in the CNF Forest Plan has a standard to manage old growth to meet habitat requirements for a minimum viable population of old growth dependent species.

Based on FIA data, the Custer NF supports 10.1% old growth that meets Green et al. definition, and 2.2% is located on the Ashland RD (Lundberg, FIA summary database). Common stand exams completed on the forest identified four of 23 stands that meet Green et al. definition of old growth. Two of these stands were located on the Ashland RD but neither was located in the BCLMP area. The project area contains micro sites in small moist areas (generally less than one acre) or within narrow linear drainage features that have individual mature trees over 17" dbh, but does not contain any stands that meet the Green et al. definition of old growth. The FEIS at page 2-35 describes that treatment are designed to maintain existing goshawk habitat within post-fledging family areas. Most of the mature trees are to be retained, as are turkey roost trees and snags. This is also explained at length in Response to Comments, Chapter 4, page 4-9, pages 4-51 to 4-55.

While there is no old growth in the project area, consideration of habitat for, and effects to, management indicator species is clearly included in the FEIS.

Issue 1a. The agency is violating the Custer Forest Plan that requires that old growth habitat be managed for all wildlife, not just the MIS for old growth.

Response: The appellant contends old growth forests provide habitat for many wildlife species and are essential for the survival of many sensitive bat species. They also contend that old growth reserves are critical to various species that require abundant cone crops, particularly the red crossbill. Snags in old growth and/or old forest stands are critical to wildlife because timber and fuels management result in a low density of small snags.

The Custer Forest Plan (page 18) states that the forest will provide for the maintenance and improvement of habitats for indicator species. Indicator species are those whose population changes are believed to indicate effects of management on other species of a major biological community. For old growth, the indicator species is goshawk.

As described in the issue response above, the project area does not contain any stands that meet the Green et al. (2005) definition of old growth, and effects to goshawk habitat are covered at length in the FEIS (pages 3-300 to 3-322). The project is designed to maintain habitat by making it less likely to be lost in a stand-replacing fire event (see Purpose and Need, FEIS page 1-4). At page 3-352, the BCLMP FEIS considers the red crossbill *(Loxia curvirostra.* It is a species of local interest. It is present in the project area, but is not a MIS or Key Species. "Local population trends for red crossbill presence/abundance may be tied to changes in pine seed production. Flocks of immature red crossbills (nonbreeding) were observed in the project area during 2010 (Records in NHTracker database)." Page 2-22 of the FEIS describes how existing snags are to be retained throughout the treatment units, as do pages 4-67 to 4-71. Also see Issue 4 below.

There is no proposed treatment in old growth in the BCLMP project area, the forest is providing for the maintenance and improvement of habitats for indicator species, and therefore the project is not in violation of the Custer Forest Plan.

Issue 1b. The agency's rationale for not managing for old growth for associated wildlife, as indicated by the goshawk, is arbitrary and capricious.

Response: The appellant contends that the lack of old growth does not eliminate the Forest Plan requirement to maintain viable, well-distributed populations of native wildlife.

The Forest Plan identifies goshawk as a management or habitat indicator species (MIS) for old growth. The goshawk is a species whose population changes are believed to indicate effects of management on other species of a major biological community (i.e. old growth). The Forest will provide for the maintenance and improvement of habitats for these indicator species (FP page 17-18). The northern goshawk is considered a proxy species for all other wildlife species that require old growth forest during their lifecycle. This concept also relies on the premise that if adequate habitat is managed or maintained, in this case old growth forest, viable populations of the MIS will also be managed and maintained.

Page 3-284 of the FEIS states that Ninth Circuit case law has established that analysis of habitat quantity and quality can be used as a reliable proxy for species viability. See Lands Council v. McNair (Mission Brush), 537 F.3d 981, 998-999: "the rule set we set forth in Native Ecosystems Council [Jimtown] remains good law: the Forest Service may meet wildlife 'viability requirements by reserving habitat, but only where both the Forest Service's knowledge of that quality and quantity of habitat is necessary to support the species and the Forest Service's method for measuring the existing amount of that habitat are reasonable reliable and accurate.' 428 F.3d at 1250."

For this project, the district knows the quality and quantity of habitat, as well as the presence or absence of the indicator specie. Monitoring does not indicate a loss of viable populations of native wildlife, nor is it expected with this project (see FEIS pages 3-282 to 3-367).

Issue 2. The project falsely claims that the goshawk will be managed according to the current best science since no analysis of prey impacts were provided.

Response: The appellant alleges current best science was not used for the analysis on goshawk because impacts on prey species was not considered. 40 CFR, 1502.9 (b), 1502.22, 1502.24 provide guidance that NEPA documents should identify methods used, reference scientific sources relied on, discuss responsible opposing views and disclose incomplete or unavailable information. Regional Direction (Tidwell 2007) and the accompanying Northern Goshawk, Northern Region Overview (Brewer et al. 2009) provide a process to analyze project level effects to goshawk and summarize the best available science for goshawk,

The FEIS provided specifically addresses goshawk habitat, including habitat for prey species. Citing current literature and including a recent personal communication with Reynolds to inquire about the existence more current studies (email 3/4/2011), the Forest added a design feature to retain pockets of uneven aged forest containing small trees in CT1 units specifically to provide cover for goshawk prey species (FEIS pages 2-22, 4-44, 4-58, 4-59).

With respect to the appellants claim, I find the deciding official, in compliance with NEPA, CFR and Regional direction, referenced and considered multiple scientific resources, listened to concerns and opposing views, and developed and analyzed alternatives to address issues.

Issue 2a. The Forest Service misrepresents the type of treatment that will occur in goshawk habitat, and failed to define why this treatment is needed to maintain desired conditions for the goshawk.

Response: Appellant contends the Forest misrepresents the type of treatment that will occur in goshawk habitat as the Forest fails to demonstrate that logging will not include overstory trees, and that using the term "understory removal" incorrectly defines the proposed action.

The types and acres of treatments in goshawk habitat are included in the wildlife analyses on FEIS pages 3-313 to 3-322. The analysis (page 3-319) describes how, based on local fire history, continued forest succession, growth and structure development, the likelihood and risk of a large stand-replacing fire are high. In that event, the availability of goshawk habitat, primarily nesting habitat, would be greatly reduced throughout the BCLMP area. It is stated on page 3-322 that "Treatments are designed to increase landscape resiliency to wildfire, thereby maintaining and improving habitat for Habitat Indicator Species/Management Indicator Species over time." This is also described in the purpose and need in Chapter 1 given recent losses of goshawk habitat to wildfire on other areas of the Custer National Forest. Table 3.14.3 in the FEIS displays known goshawk territories on the Forest, several of which have had habitat removed by wildfire.

In regard to the proposed action, the Forest specifically discloses using "overstory removal" as a management tool throughout the document and the LIB (Liberation Cut) prescription is clearly defined as overstory removal in the tables and maps. The term "understory removal" was not used, but "thinning from below" is.

I find the responsible official clearly disclosed activities, did not misrepresent proposed actions, and describes the need for treatment.

Issue 2b. ***The agency failed to evaluate project impacts for the goshawk based on landscape habitat availability.***

Response: The appellant alleges the agency failed to evaluate project impacts for the goshawk based on landscape habitat availability.

Regional Direction (Tidwell 2007) and the accompanying Northern Goshawk, Northern Region Overview (Brewer et al. 2009) provide a process to analyze project level effects to goshawk, summarize the best available science for goshawk, and leaves options open for professional judgment at the local level (Tidwell 2007).

The Forest analyzed goshawk habitat using a 5-Step process outlined in the Northern Goshawk, Northern Region Overview (Brewer et al. 2009) which includes assessments of goshawk at the regional, forest and project levels. (FEIS page 3-300 to 3-321).

I find the Forest complied with Regional Direction and examined impacts to habitat at multiple scales.

Issue 2c. The agency failed to demonstrate that the project will contribute to goshawk viability on the Custer National Forest.

Response: The appellant argues the agency failed to demonstrate that the project will contribute to goshawk viability on the Custer National Forest.

The Forest Plan requires that habitat be maintained and improved for goshawk, which is a Management Indicator Species for old growth forest (USDA, 1986, p. 17-18). The Custer National Forest Plan (USDA,

1986) does not provide any specific standards, goals, guidelines, or recommendations that direct how habitat should be maintained or improved for goshawk.

The FEIS provides documentation where habitat associated with five previously confirmed nests had been impacted by wildfire. The purposes of the project are:

1) Reduce fuel loading (surface, ladder, and canopy fuels) on the landscape to promote lower intensity / severity fires as opposed to stand replacement fires, and
2) Promote a healthy, structurally diverse, productive, and vigorous growing ponderosa pine ecosystem that is resilient and sustainable.

The ROD asserts goshawk habitat would benefit from a decrease in risk of stand-replacing fire and an increase in resilient, structurally diverse, productive and vigorously growing Ponderosa pine ecosystems. Furthermore, the goal for MA D (FEIS 2-31) acknowledges that some short-term habitat impacts may be necessary to achieve long-term goals.

The FEIS analyzes short-term impacts on existing habitat and long-term productivity of the forest vegetation and associated habitat and provides rationale for conclusions (including citation of available literature and new recent information) in Section 3.14 p. 3-321.

In light of the FEIS, record and ROD, I find the deciding official fully considered management impacts and is justified in deciding that the risk of short-term impacts would be worth reducing the potential for stand-replacing fire and increasing long-term productivity of habitat.

Issue 2d. The agency falsely claims that goshawk population viability on the Custer is not a concern and did not take a "hard look" at impacts.

Response: The appellant asserts the agency claims that goshawk population viability on the Custer is not a concern and therefore does not take a "hard look" at project impacts.

Regional Direction (Tidwell 2007) and the accompanying Northern Goshawk, Northern Region Overview (Brewer et al. 2009) provide a process to analyze project level effects to goshawk, summarize the best available science for goshawk, and leaves options open for professional judgment at the local level (Tidwell 2007).

The Forest analyzed goshawk habitat using a 5-Step process outlined in the Northern Goshawk, Northern Region Overview (Brewer et al. 2009) which includes assessments of goshawk at the regional, forest and project levels. They considered impacts to post-fledging family areas and included design criteria to retain adequate canopy. They applied recommendations for foraging and nesting habitat from Reynolds (1992) and disclose environmental consequences on pages 3-319 to 3-322 of the FEIS.

I find the Forest took the requisite hard look at impacts to goshawk.

Issue 2e. ***The rationale provided by the agency claiming that goshawks as well as Forest viability of goshawks will not be significantly impacted by the BCLMP are invalid.***

Response: The appellant alleges that goshawks will be significantly impacted by the project.

Responding to concerns that management activities would negatively impact goshawks, the Forest developed Alternative C to analyze taking Goshawk Post-Fledging Family Areas (PFAs) out of treatment, significantly reducing miles of temporary roads and leaving larger untreated blocks of cover for goshawk habitat. Alt. C eliminates treatment of 1200-1300 acres for wildlife resource concerns, but by doing so the Forest determined

those wildlife stands would be susceptible to stand replacement fire under average weather conditions. Pages 3-321 and 3-322 of the FEIS state that Alternative B would improve habitat in the long term because of improved resiliency to wildfire, and adequately protects nesting goshawks through design criteria and activity timing restrictions. Samson (2006b) found that each national forest in Region One has enough habitat to contribute to a viable population of goshawks.

I find the rationale for the determination made in the FEIS to be based on a reasoned and sound analysis.

Issue 3. The agency failed to evaluate project impacts on key wildlife areas in the Project Area.

Response: The appellant alleges that impacts on key wildlife areas in the project area were not evaluated, specifically as it relates to ungulates and thermal cover.

Key wildlife areas are defined in the Forest Plan on page 130 as "Any area which is critical to wildlife during at least a portion of the year. This importance may be due to vegetative characteristics such as residual nesting cover, or behavioral aspects of the animals such as lambing areas. Key areas include: winter ranges, lambing/fawning/calving areas, dancing/strutting grounds, nesting areas, breeding grounds, elk wallows, riparian and woody draws, and roosting areas." Key wildlife areas are discussed for MA D in the context of range management (FP page 54).

Amendment 3 (1991) to the Custer Forest Plan identifies key wildlife habitat areas for species of concern by Ranger District. The Ashland Ranger District is not identified as containing any key habitat for species of concern. The Forest Plan standard for elk and mule deer directs that habitat shall be maintained or improved, and does not provide specific standards , goals, guidelines or recommendations for the management of big game or their habitat (FEIS page 3-22). Forest Plan page 54 states that MA D analysis must include the following: forage cover ratios, winter range requirements.

Big game habitat is recognized as an issue early on in the planning process, and is discussed in the DEIS and FEIS (FEIS page 1-8 to 1-10). Security areas and cover are discussed in detail in the wildlife section of the FEIS, from pages 3-322 to 3-338, and it is explained that hiding, thermal and screening cover is addressed with forest cover. Following specific concerns expressed by the Montana Dept. of Fish, Wildlife and Parks biologist Dean Waltee (project record Doc. B-029) regarding hiding, thermal and security cover, changes were made to the project to address those concerns. These comments and the IDT response are on FEIS page 4-62 to 4-64. In project record Doc. C-006a, Mr. Waltee expresses his support for the project given those changes. Those changes are recognized in the FEIS on page 2-23 and in the Record of Decision on page 11. The appellant made a comment regarding deer winter range/thermal cover and spring fawning ranges, which received a lengthy response published in the FEIS on pages 4-46 to 4-48. In this response, it explained that forest cover was used to consider thermal cover. Forage is addressed on FEIS page 3-325, and found not to be limiting. Winter range was mapped and is in the project record at Doc. T-112. Elk wallows are addressed on FEIS page 3-335. The FEIS states that "Deer fawning and elk calving areas are broadly distributed across the project area" (page 3-325), and page 2-23 discloses mitigation measures for big game security and disturbance to fawning/calving areas.

I find the analysis included an appropriate evaluation of impacts to key wildlife areas.

Issue 3a. The agency failed to disclose that Forest Plan direction for wildlife in Management Area (MA) D is being violated because specific habitat objectives are not defined.

Response: The appellant alleges the project violates the Forest Plan for Management Area D.

The Custer Forest Plan at page 53 describes the goal for MA D: "To maintain or improve the long-term diversity and quality of habitat for the selected species identified by Ranger District as well as accommodating other resource management activities such as timber harvest, livestock grazing, and oil and gas development. Some short-term habitat impacts may be necessary to achieve long-term wildlife goals. This goal will be achieved through direct wildlife habitat improvement, as well as selecting, scheduling and implementation of cultural practices associated with other multi-resource management activities. Efforts will be made to avoid or mitigate resource conflicts". This is restated in the FEIS on pages 2-31, where it also includes the standard to emphasize maintaining or improving wildlife habitat.
The FP identifies mule deer as the species of primary concern in Management Area D.

As described on FEIS page 2-32, commercial treatments are proposed to "create a variety of successional states for wildlife to utilize over time". The objective of the seasonal motorized closure of Road 41338 is to "increase big game security and hiding cover during the hunting season." FEIS page 2-32 describes how the treatments are consistent with MA D, which includes "Long-term diversity and quality of habitat would have a higher probability to be maintained." Commercial thinning treatments which retain greater than 40 percent canopy cover maintain hiding cover for big game. The project is designed to continue to provide habitat for wildlife, and wildlife objectives were considered in silvicultural prescriptions for stand treatment (See Forest Vegetation Specialist Report, Project Record F-047). Mule deer are considered in the analysis for big game, and at page 3-333 the effects analysis concludes "Each Alternative retains adequate big game security cover that would allow big game animals to occupy habitat across the BCLMP area post treatment." This conclusion was supported by MTFWP biologists in a letter to the Forest Service (12-28-2010). Each of the (action) Alternatives would restore the variability of the existing big game habitat (structure and distribution) and allow fire to resume a more natural role in the area's ecosystem (Baker et al. 2007). Page 3-337 of the FEIS describes consistency with the Forest Plan, and page 2-23 includes design and mitigation features to meet the needs of big game. The big game analysis on page 3-322 to 3-338 emphasizes security area. The Record of Decision at page 16 explains the need to balance "the objectives of maintaining habitats and security cover alongside the very real threat of a large stand-replacing wildfire which could remove these same forest habitats from the landscape for a significant duration of time."

I find that habitat objectives were defined and the project and Decision are in compliance with the goal and standards for Management Area D.

Issue 3b. The agency misrepresented project impacts on big game hiding cover and failed to disclose the full impact of the Project on this important habitat feature; and falsely claims the project is consistent with Forest Plan direction for MA D, including the emphasis species mule deer.

Response: The appellant alleges impacts to big game hiding cover are misrepresented and not consistent with Forest Plan direction for MA D.

As noted in the FEIS on page 3-324, the Forest Plan does not include hiding cover as a standard or guideline, and only directs that habitat for MIS species should be maintained and improved. The Forest Plan is not prescriptive in how to address hiding cover or how and where to implement it. Rather it provides flexibility to incorporate the best available science. Note that the Forest Plan definition of hiding cover (300 feet) is more liberal than the widely accepted and more conservative value used for elk (200 feet based on Lyon and Christensen 1992). Therefore, big game security cover, as measured by canopy cover > 40% dispersed across the project area, was analyzed in accordance with a recommendation from FWP. Forest-wide management standards include coordinating with State Fish and Game agencies to develop management strategies that will maintain wildlife populations with habitat capacities and management area objectives, and to manage key wildlife species and key habitat in cooperation with state and Federal agencies.

The FEIS at page 3-323 describes security cover as an indicator to be used in the analysis. Page 3-324 includes the justification for using FWP's indicator of pine canopy cover that is ≥ 5 ft tall and ≥ 40% canopy cover. The effects to big game cover are discussed in the FEIS on page 3-333 to 3-338. The rationale for decision regarding big game cover and security are described in the Record of Decision. The appeal transmittal letter (PR Doc V-005, page 46) clarifies that 3,698 acres of forested vegetation currently exist in the BCLMP area with canopy cover greater than 40 percent. Commercial treatments on 547 acres of that would result in canopy cover less than 40 percent. The CT-1 and noncommercial treatments were excluded because any existing canopy cover greater than 40 percent would not be reduced to less than 40 percent post treatment. Much of the commercial treatments occur in areas where canopy cover is currently less than 40 percent.

Analysis methods, assumptions and results are disclosed and transparent; therefore I do not agree that impacts to big game cover are misrepresented. Consistency with the Forest Plan is addressed in the previous issue response.

Issue 3c. The agency misrepresented project impacts on big game security, and thus failed to disclose actual impacts of the project on this key habitat element.

Response: The appellant asserts impacts to big game security are misrepresented.

The Custer Forest Plan states that implementation guidelines for projects will address quality and quantity of vegetation, i.e. residual nesting cover or thermal cover, necessary to meet the identified habitat and population goals. Analysis of wildlife values and impacts will include forage cover ratios pre and post sale (page 54). The Forest Plan does not list "key habitat elements." It does define "key areas" as winter ranges, lambing/fawning/calving areas, dancing/strutting grounds, nesting areas, breeding grounds, elk wallows, riparian and woody draws, and roosting areas.

Big game habitat is recognized as an issue in Chapter 1 of the FEIS, and security area in relation to roads open to motorized use is an issue indicator (pages 1-9 and 1-10). Big game security is a design feature and mitigation on page 2-23, for both items 12 (woody draws) and 15. The analysis for big game includes rationale for using security areas based on road density (pages 3-324 and 3-325), a discussion of existing road density and best science (pages 3-326 to 3-332), and the effects of the project on road density and security (pages 3-334 to 3-336). Security areas are defined as any area greater than or equal to one half mile from an open motorized route. These areas are mapped and displayed in the FEIS, for both the project area and for the Ashland Ranger District. Table 3.14.10 displays security area by alternative. The Record of Decision includes rationale for decision in regard to big game cover and security. Pages 18 and 19 of the ROD describe how security concerns drove development of new alternatives. Numerous comments (#87, #92, #113-115) were received from the appellant on this issue and responded to in Chapter 4 of the FEIS.

Analysis methods, assumptions and results are disclosed and transparent; therefore I do not agree that impacts to big game security are misrepresented.

Issue 3d. The cumulative impacts of new roads on big game were misrepresented in the agency's BCLMP analysis, and does not follow the current best science.

Response: The appellant alleges impacts of new roads on big game were misrepresented in the analysis.

The FEIS on page 3-325 describes that research scientists Lyon and Christensen (PR Docs. T-028, T-096, T-098) recommend a habitat effectiveness of 50% or greater, or an open road density of less than 1.9 mi/sq mi. Habitat effectiveness refers to the percentage of available habitat that is usable by elk outside the

hunting season. The ROD at page 14 states: "Best available science recommends that road density be less than 1.0 mile per square mile for big game security (Christensen et al. 1993)".

The project will create no new permanent roads (FEIS page 3-335), and will construct and then obliterate 15.2 miles of temporary road (ROD page 8). The FEIS discloses that temporary roads and associated motor vehicle traffic would result in short-term disturbance to elk for the life of the sale and associated activities. Actual projected disturbance from activities implementing the decision are discussed on page 3-334, and no more than 20 percent of the BCLMP area would be impacted in any one year, providing refugia for big game animals. This was also explained at length in response to comment #92 from the appellant (FEIS pages 4-46 to 4-48). The open motorized road density in the area after implementation is 1.43 miles, well within amounts recommended in literature. Seasonal closures of two routes during hunting season will bring the open motorized route density to .97 miles/sq. mi. (ROD page 14).

I find that impacts to big game are disclosed in the Final Environmental Impact Statement for BCLMP, and that the analysis considered and applied "current best science".

Issue 3e. Logging of ponderosa pine trees out of deciduous stands was not demonstrated to improve habitat for big game or other wildlife.

Response: The appellant contends removing ponderosa pine from deciduous stands does not improve wildlife habitat.

The Custer Forest Plan provides direction for woody draws as Management Area N. Timber may be harvested only if woody draw wildlife and fishery habitat values can be improved or protected. Due to their scattered nature across the landscape, they were not mapped in the Forest Plan. Treatment in woody draws (or deciduous stands) is referred to as a "special cut". Mapping for the BCLMP places the special cut treatments in MAs D and G.

The appellant submitted a similar comment regarding pine and aspen, which is found on FEIS page 4-46. The response follows: "Numerous studies over the last decade have supported the fact that aspen is a disturbance-dependent species that flourished when western lands burned periodically. Fire suppression or lack of disturbance on much of these lands has converted, or is in the process of converting, aspen stands to other vegetation types such as conifer or sagebrush. Three of the most critical products being lost from the aspen system as a result of this conversion are water, undergrowth vegetation, and biodiversity (Bartos 2007). Aspen stands represent a small deciduous component of the landscape, are important for diversity, and provide numerous wildlife benefits including cover, browse, and nesting habitat for many species, such as migratory birds".

Appendix B of the FEIS (and page 3-182) describes the treatment activity as removing the overtopping and competing ponderosa pine trees. It refers to green ash and aspen as "intolerant". This is a silviculture term that means these species do not grow well in the shade, in this case in the shade of pine trees. The pine are also competing for water, generally a limited resource on the Custer National Forest. Table 3.14.1 displays that woody draws or deciduous forests are favored by Bullock's oriole, ovenbird, and spotted towhee. Design feature and mitigation # 12 (FEIS page 2-23) states : "In key identified wildlife travel corridors along riparian and woody draw bottoms where healthy, vigorous understory pine thickets occur, limited thinning will occur to promote 1 to 2 acre patches of big game security cover and travel corridors." The objective of treatments is "to improve the condition of the aspen/green ash stand, thus enhancing habitat type that is not overly abundant in the project area." Treatment would provide healthy plant communities and increase diversity in the understory vegetation, enhancing wildlife values." (FEIS page 2-36).

Appellant cites the following literature for the first time in the appeal: Krantz and Linder 1973, Conway and Martin 1993, Hough 2008.

The vegetative effects of removing ponderosa pine trees from woody draws are disclosed in Chapter 3 in the discussion on sensitive plants (pages 3-181 to 3-184), and wildlife values are included in the Response to Comments (Chapter 4), Chapter 2, and Appendices B and E.

Based on the FEIS analysis, I find the treatment of deciduous stands maintains wildlife habitat.

Issue 3f. The agency failed to demonstrate with published science or monitoring data that prescribed burning of openings and logged forest stands constitutes habitat improvement for big game or other species, except domestic cattle.

Response: The appellant alleges the analysis failed to demonstrate that treatments constitute habitat improvement for big game or other species.

A portion of the project occurs in CNF Forest Plan Management Area D, where the objective is to maintain or improve the long-term diversity and quality of habitat for selected species identified by the Ranger District as well as accommodate other resources management activities such as timber harvest, livestock, grazing, and oil and gas development.

The analysis includes numerous scientific references which aided in the determination of effects to big game and other wildlife species. For black-backed woodpecker (FEIS p.3-342), it is shown that prescribed burning could help in overwinter survival of cavity-dependent birds. Bateman and O'Connell (2006) state that forest management that results in a mosaic of burned and unburned stands, as well as heterogeneity with these stands could promote the overwinter survival of cavity-nesting birds. Low intensity fire would create patches of snags across the landscape favoring the territorial distribution of woodpeckers (Bull et al. 1997).

The BCLMP FEIS states on page 3-364 that for the Northern Goshawk the proposed timber harvest prescriptions, prescribed burning, and project design criteria will help maintain or promote/ improve suitable nesting and foraging habitat. Numerous literature citations are included in the narrative describing territory habitat features on page 3-307.

For big game (p.3-334), over 40 literature references, provided by MTFWP (12-28-2010) support forage and cover benefits for big game and other wildlife of the proposed fuels treatments (also see PR Doc T-208, and "References cited – Corrected" in the FEIS).

For black-tailed and white-tailed prairie dogs (FEIS p.3-363), black footed ferret and black-tailed prairie dog habitat would be maintained or potentially expanded with prescribed burning.

The prescriptions from intermediate (CT, CT1, SC, and SCNC) harvest, regeneration harvest, and prescribed burning are designed to maintain the largest overstory trees and therefore provide a source of live and dead roost sites for bats. (FEIS page 3-349, Morris et al. 2010 in References- Corrected).

Mechanical treatments, prescribed burning and project design features(e.g. woody draw) will help maintain or create (improve) edge habitat and habitats(e.g. sage and woody draws) for migratory birds(p.3-363) .

With regard to the appellants challenge, I find that the analysis does cite published science for several species to show that prescribed burning of openings and logged forest stands constitutes habitat

improvement for big game or other species. For other species the improvement of habitat is based on the habitat needs of the species and the treatments associated with the project.

Issue 4. The agency will violate the Custer Forest Plan requirement to maintain viable populations of native wildlife species associated with snag habitat; no actual snag management program has been designed for the project; snag numbers after logging will be unknown, and cannot provide a proxy for associated populations; no MIS exists for snags on the Custer Forest, to impacts of the project will not be monitored; detrimental impacts were not disclosed and the level of detrimental impact, both short and long-term, are unknown although this information could have been developed.

Response: The appellants contend the project does not manage for snag habitat.

The Forest conducted a systematic survey and assessment for available snags and snag habitat for this project (FEIS 3-340, 341; PR, Doc. T-188). The survey and assessment found an average of over 22 snags per acre, with over 9 per acre greater than 11.5 inches diameter, well above the numbers found in unmanaged stands of similar eastside forest types (Bollenbacher et al. 2008, FEIS 3-340, PR T-018)

Project design feature #11 and silvicultural prescriptions (FEIS p. 2-22, FEIS Appendix B) ensure snag maintenance and recruitment. The intent is that existing snags are to be maintained (FEIS p. 4-70 #130).

Nevertheless, the Forest recognized that safety and feasibility will result in the loss of some snags; particularly along existing roads and adjacent to private land. Therefore, the design feature includes additional criteria to ensure that, at minimum on average per acre, at least two large existing snags are retained (FEIS p. 2-22, 4-70 #130, 4-68 #123).

The Forest's approach is consistent with the Northern Region Snag Management Protocol (USDA Forest Service, 2000a, PR T-178) in that snag retention and recruitment prescriptions should be applied, where possible, at the stand scale, but success should be measured at the watershed scale.

Future snag recruitment is explicitly addressed in the proposed treatments' design (FEIS Appendix B). Suitable cavity nesting trees or snags occur as trees die or are damaged. Future snags will be no larger than the trees they come from. The proposed treatments retain sufficient live trees for future snag recruitment and the majority of treatments will result in larger available snags over time across the landscape then would be expected under the no action alternative (FEIS 3-341, 342). Additionally, the treatments increase the forest's resilience to stand replacing disturbances such as wildfire, where many snags would be created at once but would be followed by decades of little or no snag recruitment (FEIS 3-341).

The FEIS analyzed and describes the effects of the various proposed treatments on snag and cavity habitat and species (FEIS 3-341 to 3-444, 4-69 #128). The analysis recognizes, for example, higher snag loss from the regeneration treatments than from thinning treatments, and that activities such as prescribed burning will both eliminate some existing snags and create new snags. The analysis conclusion that at the stand level minimum required snag levels will be met and at the project level will be exceeded and future recruitment is assured is reasoned and supported by the evidence. This is not a significant issue and more detailed analysis is not warranted in this case. The Forest took the requisite hard look.

Furthermore, the Forest responded explicitly and appropriately to comments provided by the appellants prior to the decision (for example, FEIS 4-65 to 4-71). Responses included adjustments to the analysis for the FEIS and consideration of scientific literature provided by the appellants.

I find the project clearly includes management for snags.

Issue 5. New Information and references and/or Literature Cited submitted by Appellants AWR and NEC in the appeal of Beaver Creek Landscape Management Project.

Response: The appellant alleges the Forest Service did not consider the references they submitted.

Appellants, in part, base their appeal contentions on over 80 literature citations introduced for the first time here during appeal. At least 35 of these were not even included or attached to the appeal. They did not put the agency on notice of this information they now contend is relevant to their issues (project appeal transmittal letter, p. 99-102). The notice and comment period is intended to solicit information, concerns, and any issues specific to the proposed action and to provide such comments to the Responsible Official before the decision is made. The intent in requiring comments is to obtain meaningful and useful information from individuals about their concerns and issues, and use it to enhance project analysis and project planning. Waiting until the appeal period to raise an issue or concern does not give the Responsible Official an opportunity to consider the impacts of the project in light of public concerns.

Due to the fact the appellants did not bring this information and related concerns to the attention of the Responsible Official at the appropriate time, I will not consider this untimely information. I have, however, considered the broader contentions as documented above based on the information and assertions that were provided to the Responsible Official prior to the decision.

I will point out, however, that the Responsible Official did a commendable job reviewing, considering, and responding to literature that the appellants did provide in a timely manner, incorporating relevant information into the analysis for the FEIS (for example, see FEIS 4-20 to 4-71, Response to Comments 46, 83, 106, 109, 124, 125, 129, and FEIS 3-343).

RECOMMENDATION

I have reviewed the record for each of the contentions addressed above and have found that the analysis and decision adequately address the issues raised by the appellant. I recommend the District Ranger's decision be affirmed and the appellant's requested relief be denied.

/s/ Julie K. King
JULIE K. KING
Appeal Reviewing Officer

cc: Ray G Smith
Mark Slacks
Amy L Waring